

**REQUEST FOR QUOTATION
BIDS TO BE SUBMITTED TO:
DEPARTMENT OF PURCHASES
27 WEST MAIN STREET, ROOM 401
NEW BRITAIN, CT 06051**

Bid No. 3823Issued: March 24, 2015Page 1 of 25 Pages

Sealed bids, subject to the conditions set forth on the second page hereof, will be received by the City Purchasing Agent until the time and date set forth. In compliance with all of the conditions hereof, the Bidder, whose name appears hereon, offers and agrees to furnish and deliver to the destination all of the commodities and/or services against which prices are quoted.

Prices Quoted Must be F.O.B. 1000 Shuttle Meadow Ave.,New Britain, CTDate of Bid Opening April 20, 2015 Time 11:00 AM

Delivery Required _____

Jack Pieper
Purchasing Agent

Amount of Bid Bond NoneBid No. 3823

Date Submitted _____

Delivery: _____ days after receipt of order

Terms: Cash Discount _____ % 30 Days

Net Cash _____ Days

Bidder _____

Street _____

City _____ ST _____ Zip _____

Signature and Title

(Printed name of signer)

Bidder's Telephone Number _____

Bidder's Email Address _____

ITEM NO.	DESCRIPTION OF COMMODITIES AND/OR SERVICES	UNIT PRICE
1	<p>FURNISH AND DELIVER WATER METERS AND RELATED EQUIPMENT TO THE NEW BRITAIN PUBLIC WORKS DEPARTMENT, UTILITIES DIVISION, AS PER THE ATTACHED SPECIFICATIONS</p> <p>WATER METER TYPE:</p> <p><u>Neptune Technology Group, Inc.</u> <u>NO SUBSTITUTES</u></p> <p>Duration of the Bid Price (How long will bid price be held for) Number of Days? _____</p> <p>****PLEASE SUBMIT BIDS IN DUPLICATE****</p> <p>THE FOLLOWING MUST BE EXECUTED/COMPLETED AND RETURNED:</p> <ol style="list-style-type: none"> 1. Form Pur. 1 (Request for Quotation). 2. Notices to Prospective Bidders, Pages 22-24. 3. W9 and the Non-Collusive Forms must also be completed and submitted With the bid <p><u>BIDS WILL NOT BE ACCEPTED AFTER THE STATED BID OPENING DATE AND TIME.</u></p> <p>PLEASE NOTE THAT BIDS SUBMITTED CANNOT BE FAXED OR E-MAILED.</p>	<p>PLEASE SUBMIT PRICING ON PAGE NINETEEN (19)</p>

IMPORTANT - READ CAREFULLY BEFORE MAKING BID: CONDITIONS, BID TERMS AND INSTRUCTIONS
CITY OF NEW BRITAIN CONNECTICUT -DEPARTMENT OF PURCHASES

1. All bids must be submitted on and in accordance with this form. If more space is required to furnish a description of the commodities and/or services offered or delivery terms, the Bidder may attach a letter hereto which will be made a part of the bid. All bids must be submitted in duplicate in sealed envelopes clearly identified with the appropriate bid number.
 2. Bids and amendments thereto, or withdrawal of bids submitted, if received by the City after the date and time specified for bid opening, will not be considered. If any person contemplating the submission of a bid on this invitation is in doubt as to the true meaning of any part of the specifications, plans or other documents, he should submit a written request for an interpretation thereof to the City Purchasing Agent at least 10 days prior to scheduled bid opening. An interpretation of the bid invitation documents will be made only by addendum duly issued to each person receiving a bid invitation and/or holding plans. The City of New Britain will not be responsible for explanations or interpretations of bid invitation documents except as issued in accordance herewith. Note regarding addenda: Addenda shall be mailed via certified mail to all vendors listed on the City's list of plan holders. Addenda will be made available to those vendors downloading specifications from a website at that same website.
 3. Prices should be stated in units of quantity specified, with packing and delivery to destination and all other incidental charges included.
 4. The time of proposed delivery must be stated in definite terms. If time of delivery for different commodities varies, the Bidder shall so state.
 5. Samples, when requested, must be furnished free of expense to the City, and if not destroyed, will, upon request, be returned at the Bidder's risk and expense.
 6. Price Quotations must be stated in units of quantity specified, show unit pricing, include packing and delivery to destination and all other incidental charges included in the grand total price or bid may be rejected. In case of error in the extension of prices, the unit price shall govern.
 7. Unless qualified by the provision "NO SUBSTITUTE", the use of the name of a manufacturer, brand, make or catalog designation in specifying an item does not restrict Bidders to the manufacturer, brand, make or catalog designation identification. This is used simply to indicate the character, quality and/or performance equivalence of the commodity desired, but the commodity on which bids are submitted must be of such character, quality and/or performance equivalence that it will serve the purpose for which it is to be used equally as well as that specified. In submitting bids on a commodity other than as specified, Bidder shall furnish complete data and identification with respect to the alternate commodity he proposes to furnish. The City reserves the right to make final determination of equivalency.
- Consideration will be given to bids submitted on alternate commodities to the extent that such action is deemed to serve best the interests of the City. If the Bidder does not indicate that the commodity he proposed to furnish is other than specified, it will be construed to mean that the Bidder proposes to furnish the exact commodity described.
8. Bidder declares that the bid is not made in connection with any other Bidder submitting a bid for the same commodity or commodities, and that the bid is bona fide and is in all respects fair and without collusion or fraud. Abstracts of bids received are prepared for distribution by the Department of Purchases.
 9. Award will be made to the lowest responsible qualified Bidder, who shall be determined in accordance with and pursuant to Section 2-578, inclusive of the Purchasing Ordinances City of New Britain. The quality of the articles to be supplied, their conformity with the specifications, their suitability to the requirements of the City, and the delivery terms will be taken into consideration in making the award.
 10. **Section 2-578, item 10, allows up to a ten (10) percent differential in favor of resident Bidders for all purchases and contracts except construction and/or capital improvements. Any city-based bidder, which has submitted a bid, shall be awarded the bid provided that such city-based bidder agrees to accept the award of the bid at the amount of the low bid. In a situation where no city-based bidder submits a bid or where a city-based bidder does not come within the ten (10) percent or chooses not to meet the lowest bid however, there are bids submitted by companies based in Connecticut and other companies based outside Connecticut, in that event the Purchasing Agent shall allow a five (5) per cent differential in favor of the Connecticut based bidder. If more than one Connecticut based bidder submits a bid of not more than five (5) percent higher than the low bid and has agreed to accept the award of the bid at the amount of the low bid, the bidder who has submitted the lower/lowest bid shall be awarded the bid. A "Connecticut based bidder" shall mean a business with a legal principle place of business located within the State of Connecticut. A business shall not be considered a Connecticut based bidder unless evidence satisfactory to the purchasing agent has been submitted with the bid documents has a bona fide principle place of business within the State of Connecticut. For construction projects or capital improvements the lowest bidder shall be determined in the following order unless otherwise prohibited by applicable state and federal legislation. (1) For construction projects or capital improvements involving a total contract price of one million dollars (\$1,000,000.) or less any city-based bidder that submitted a low bid not more than eight (8) percent higher than the lowest bid, provided such city-based bidder agrees to accept the award of the bid at the lowest bid amount. (2) For construction projects and capital improvements of involving a total contract price of more than one million dollars (\$1,000,000.) but less than five million dollars (\$5,000,000.) any city-based bidder that submitted a low bid not more than four (4) percent higher than the lowest bidder, provided such city -based bidder agrees to accept the award of the bid at the lowest bid amount. For construction projects and capital improvements involving a total contract price of over five million dollars (\$5,000,000.) any city-based bidder that submitted a low bid not more than two (2) percent higher than the lowest bid, provided such city-bases bidder agrees to accept the award of the bid at the lowest bid amount.**
 11. The City reserves the right to award by item, groups of items or total bid; to divide the award; to reject any and all bids, in whole or in part, and to waive any informality or technical defects if, in its judgment, the best interests of the City will be served.
 12. Cash discounts may be offered by bidder for prompt payment of bills, but such discount will not be taken into consideration in determining the low Bidder but will be taken into consideration in awarding tie bids. The discount period will be computed from the date delivery is accepted at destination or from date correct invoice is received by the consignee, whichever is the later date.
 13. Acceptance of a bid by the City is not an order to ship or a commitment to purchase the goods or services from the bidder.

14. Each bid is received with the understanding that the acceptance in writing by the City of the offer to furnish any or all of the commodities and/or services described therein shall constitute a contract between the Bidder and the City, which shall bind the Bidder on his part to furnish and deliver the articles quoted at the prices stated and in accordance with the conditions of said accepted bid.
15. Any equipment delivered must be standard new equipment, latest model, except as otherwise specifically stated in bid. Where part or nominal appurtenances of equipment are not described, it shall be understood that all the equipment and appurtenances which are usually provided in the manufacturer's stock model shall be furnished.
16. In event of default by the Bidder, the City reserves the right to procure the commodities and/or services from other sources and hold the Bidder liable for any excess cost occasioned thereby. If, however, public necessity requires use of materials or supplies not conforming to the specifications, they may be accepted and payment therefore shall be made at a proper reduction in price.
17. Where a bid bond is required, such bond must accompany the bid; it must be executed by a surety company licensed to do business in the State of Connecticut; or it may be in the form of a cashier's or certified check made out to the "Treasurer, City of New Britain". Said bond or check in the amount of Ten Percent (10%) of the total bid amount shall be given as security that, if the bid is accepted, a contract will be entered into and the performance guarantee properly secured.
18. The bid bond, cashier's or certified check shall be forfeited and the principal amount of said bid bond shall be paid to the City or said check shall be surrendered to the City as the agreed amount of liquidated damages in case of failure of Bidder to enter into contract as above described. The bid bond or check will be released or returned to the Bidder in case his bid is rejected. Bid bonds or checks from the three lowest bidders will be held for a period of 60 days after the bids are opened.
19. All contracts for goods or services where the contract price is more than \$50,000.00 will require a performance bond that must be executed by a surety company licensed to do business in the State of Connecticut in accordance with and pursuant to Section 2-702 inclusive of the Purchasing Ordinances of the City.
20. The Bidder guarantees to save the City, its agents or employees, harmless from liability of any nature or kind, for use of any copyrighted or uncopyrighted compositions, secret process, patented or unpatented invention, articles or appliances furnished or used in the performance of the contract, or which the Bidder is not the patentee, assignee or licensee.
21. The Bidder, where applicable, agrees to pay its labor force Prevailing Wage Rates and to comply to all Laws, Regulations and Ordinances regarding these wage rates and the recording of them set forth by the Connecticut Department of Labor and the City of New Britain Connecticut.

**CITY OF NEW BRITAIN
PUBLIC BID NO. 3823**

The City of New Britain, through its Purchasing Agent, is seeking competitive bids for the following commodity:

**METERS-VARIOUS SIZES AND RELATED EQUIPMENT – UTILITIES DIVISION.
(to be ordered on an “as needed” basis from July 01, 2015 to June 30, 2016)**

Specifications for the product required follow. The Purchasing Agent reserves the right to divide the award and the right to reject any and all bids, in whole or in part, as best serves the interests of the City of New Britain. ***SEALED BIDS ARE TO BE SUBMITTED BY THE DATE AND TIME SPECIFIED ON THE COVER SHEET TO: CITY OF NEW BRITAIN PURCHASING DEPT., ROOM 401, 27 WEST MAIN ST., NEW BRITAIN, CT 06051. BID ENVELOPE IS TO BE CLEARLY MARKED ON THE OUTSIDE WITH BID NUMBER AND NAME.***

Notice to Bidders:

- 1. All delivery and any incidental charges must be included in the pricing. Delivery point is 1000 Shuttle Meadow Ave., New Britain, CT. Pricing submitted by the Bidder is firm with no price increases throughout the Bid Term from July 1, 2015 to June 30, 2016.**
- 2. The City of New Britain is exempt from the payment of taxes imposed by the federal government and/or the State of Connecticut; such taxes shall not be included in the bid prices.**
- 3. Exceptions to specifications must be clearly stated on a separate piece of paper.**
- 4. Manufacturer and model must be clearly stated. Warranty information must be provided by the Bidder and submitted with the Bid Documents.**
- 5. Questions regarding the Purchasing process may be directed to Jack Pieper, Purchasing Agent, (860) 826-3402. Questions regarding technical specifications may be directed to Kenneth Marzi, New Britain Public Works Department, Utilities Division, (860) 826-3538.**
- 6. Vendor Insurance Requirements are as follows:**

Vendor shall agree to submit proof of and to maintain in force at all times during which services are to be performed the following coverages placed with company(ies) licensed by the State of Connecticut which have at least an “A-” VIII policyholders rating according to Best Publication’s latest edition Key Rating Guide. The Vendor agrees to name the City as Additional Insured on all insurance policies except Workers Compensation. The Vendor also agrees to provide the City a Waiver of Subrogation on all Insurance Policies.

CITY OF NEW BRITAIN
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		(Minimum Limits)
General Liability*	Each Occurrence	\$1,000,000
	General Aggregate	\$2,000,000
	Products/Completed Operations Aggregate	\$2,000,000
Auto Liability*	Combined Single Limit	
	Each Accident	\$1,000,000
Umbrella* (Excess Liability)	Each Occurrence	\$1,000,000
	Aggregate	\$1,000,000

* "The City of New Britain and Consolidated School District" shall be named as "Additional Insured". Coverage is to be provided on a primary, noncontributory basis.

If any policy is written on a "Claims Made" basis, the policy must be continually renewed for a minimum of two (2) years from the completion date of this contract. If the policy is replaced and/or the retroactive date is changed, then the expiring policy must be endorsed to extend the reporting period for claims for the policy in effect during the contract for two (2) years from the completion date.

Workers' Compensation and WC Statutory Limits		
Employers' Liability	EL Each Accident	\$500,000
	EL Disease Each Employee	\$500,000
	EL Disease Policy Limit	\$500,000

Original, completed Certificates of Insurance must be presented to the Purchasing Agent prior to purchase order/contract issuance. Vendor agrees to provide replacement/renewal certificates at least 60 days prior to the expiration of the policy. Should any of the above-described policies be cancelled before the expiration date, written notice must be made to the City 30 days prior to cancellation.

The Vendor shall agree to submit proof of the following coverages placed with company(ies) licensed by the State of Connecticut which have at least an "A-" VIII policyholders' rating according to Best Publication's latest edition Key Rating Guide.

7. **HOLD HARMLESS AGREEMENT:** The Vendor, its agents and assigns shall indemnify and hold harmless the City of New Britain, including but not limited to, its elected officials, its officers, and agents, ("the City") from any and all claims made against the City, including but not limited to, damages, awards, costs and reasonable attorneys fees, to the extent any such claim directly and proximately results from the wrongful willful or negligent performance of services by the Contractor during the Vendor's performance of this Agreement or any other Agreements of the Vendor entered into by reason thereof. The City agrees to give the Vendor prompt notice of any such claim and absent a conflict of interest, an opportunity to control the defense thereof.

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8. The City may make such investigations as it deems necessary to determine the ability of the bidder to perform the work, or deliver the needed items and the Bidder shall furnish to the City all such information and data for this purpose as the City may request. The City reserves the right to reject any and all bids if evidence submitted by or investigation of such Bidder fails to satisfy the City that such Bidder is properly qualified to carry out the obligations of the bid and to complete the work or delivery of the items contemplated therein.
9. The City shall not be held responsible for any misspellings, typographical errors, omission or conflicting information within the bid documents. If the Bidder finds any within the bid documents, the Bidder should contact the Purchasing Agent requesting clarification.
10. The City may consider as irregular any bid on which there is an alteration of or departure from the Bid Forms hereto attached and at its option may reject the same. The City reserves the right to reject any Bid submitted that is not in full compliance with these Instructions to the Bidders as being not responsive. The City also reserves the right to reject the Bid of any Bidder it considers not responsible.
11. The City reserves the right to accept or reject any or all bids and to withdraw this invitation to bid at any time before or after the bids are opened.
12. The City shall not be held responsible for any misspellings, typographical errors, omission or conflicting information within the bid documents. If the Bidder finds any within the bid documents, the Bidder should contact the Purchasing Agent requesting clarification.
13. If City Hall is closed on the day of the bid opening due to inclement weather or any other conditions, the bid opening date shall be postponed until the same hour on the next day that City Hall is officially open for business.
14. Please note that it is the Bidder's responsibility to check on-line a minimum of twenty-four (24) hours in advance of the bid opening to determine if an addenda have been issued.
- 15. All Bidders must complete the W9, Non Collusive Affidavit of Bidders and the Notice To Prospective Bidders Certification Required forms, with are attached, and submit them with their bid documents in order for their bids to be considered. Bidders shall certify that neither they nor any business or corporation fully or partially owned by the bidders are not delinquent on the payment of City property taxes or fees. The Non Collusive Affidavit must be also be signed and notarized by an official State Notary and the Notary's seal placed on it. If the required forms are not completed the City reserves the right to reject the submitted bid.**
- 16. Please Submit Bids in Duplicate**
- 17. Pricing submitted by the Bidder is firm with no price increases throughout the Bid Term from July 1, 2015 to June 30, 2016.**

SPECIFICATIONS: VARIOUS SIZE WATER METERS

The New Britain Public Works Department, Utilities Division, through the City Purchasing Agent, is soliciting bids for Neptune Technology Group, Inc. water meters per the following specifications. This type of water meter is presently being utilized and will conform with other City water meters. Meters are to be ordered on an as needed basis by the Utilities Division. Quantities are estimates no guarantee is made, express or implied, as to the actual quantities to be ordered.

1. 2,000 - Radio Frequency Meter Interface Units (MIU) per the specifications attached.
2. 25 – Straight 5/8” meters. These meters should not come with MIUs. Only the meters are requested
3. 1,200 - 5/8”x3/4” cold water meters. These meters shall not come with MIUs. Only the meters are requested.
4. 100 - 3/4” cold water meters. These meters shall not come with MIUs. Only the meters are requested.
5. 72–1” cold water meters. These meters shall not come with MIUs. Only the meters are requested.
6. 25-1 1/2” cold water meters. These meters shall not come with MIUs. Only the meters are requested.
7. 40–2” cold water meters. These meters shall not come with MIUs. Only the meters are requested.
8. 4 – 4” Tru/Flow Compound Meters.
9. 4 - 4” Turbine Meter
10. 2- 6” Compound Meters.
11. 2 – 12321-000 DAP CE5320 Handheld Meter Reading 2MB Ram, 128 MB Flash with Equinox.
12. 2– Each Intergrated RF Receiver HR2680 for R900 Pocket Pro reader and advantage probes.
13. 2 – Ethernet Communications and charging cradle for DAP CE5320.
14. 2 – 12517-000 Advantage II Complete Probe/ARB Neptune.
15. 6 – 11922-001 Battery Pack Neptune for Advantage Probe.

All Meters will measure in cubic feet.

Meters should not have outside receptacles.

The Utilities Division does not want all meters shipped all at one time. The Utilities Division will order the meters in an “As Needed Basis” The Utilities Division will call to order meters when they need them. Quantities are estimates only, no guarantee is made, express or implied, as to the actual meter quantities to be ordered.

Specifications for Meter with Encoder Register and Radio Frequency Meter
Interface Units

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Specifications for Meter with Encoder Register and Radio Frequency Meter Interface
Units Continued

COLD WATER METERS

A. SCOPE

1. All meters furnished shall be produced from an ISO 9001 manufacturing facility and conform to the "Standard Specifications for Cold Water Meters" -C700, latest revision issued by AWWA or as otherwise stated.

B. TYPE

1. Only magnetic driven, positive displacement meters of the flat nutating disc type will be accepted because of enhanced low flow accuracy performance.

C. SIZE, CAPACITY, LENGTH

1. The size, capacity, and meter lengths shall be as specified in AWWA Standard C700 latest revision. The maximum number of disc nutations is not to exceed those specified in AWWA C700 latest revision, Sec. 4.2 Registration, Table 1.
2. All meter maincases shall be made of a no-lead brass containing a minimum of 85% copper, such as Envirobrass II, that meets NSF 61 standard. The serial number should be stamped between the outlet port of the maincase and the register. Maincase markings shall be cast raised and shall indicate size, model, direction of flow, and NSF61 Certification. Plastic maincases are not acceptable.
3. Meters for 5/8", 3/4" and 1" shall be of the removable bottom cap type with the bottom cap secured by four (4) bolts on 5/8" and 3/4" sizes and six (6) bolts on the 1" size. Intermediate meter maincases shall also be made of the same no-lead brass material in sizes 1-1/2" and 2" type with an upper top plate secured to the maincase with eight (8) bolts, a screw on design shall not be accepted. Meters with a frost plug, screw on or no bottom cap shall not be accepted in 5/8"-1" sizes. The no-lead 5/8" meters shall have a synthetic polymer or cast iron bottom cap.
4. All no-lead brass maincases shall be guaranteed free from manufacturing defects in workmanship and material for the life of the meter.
5. All meters must be adaptable to a field programmable absolute encoder type register without interruption of the customer's service.

D. BOLTS

1. All maincase bolts shall be of 300 series non-magnetic stainless steel to prevent corrosion.

E. MEASURING CHAMBER

1. The measuring chamber shall be of a 2-piece snap-joint type with no fasteners allowed. The chamber shall be made of a non-hydrolyzing synthetic polymer. No screws shall be used to secure the chamber together.
2. The control block shall be the same material as the measuring chamber and be located on top of the chamber. The control block assembly shall be located after the strainer.
3. The measuring chamber outlet port shall be sealed to the maincase outlet port by means of an "O" ring gasket.
4. The flat nutating disc chamber shall be of one piece and made from non-hydrolyzing synthetic polymer, and shall contain a type 316 stainless steel spindle. The nutating disc shall be equipped with a synthetic polymer thrust roller located within the disc slot. The thrust roller head shall roll on the buttressed track provided by the diaphragm.

5. The chamber shall be warranted for 10 years against freeze damage if the meter has been equipped with a frost proof cast iron or synthetic polymer bottom cap.

F. STRAINERS

1. All meters shall contain removable polypropylene plastic strainer screens. The strainer shall be located near the maincase inlet port, before the measuring chamber and control block assembly. The strainer shall also function as the device that holds the measuring chamber in place within the maincase. Straps or other types of fasteners shall not be accepted.

G. PERFORMANCE

1. To ensure accuracy, each meter must be accompanied by a factory test tag certifying the accuracy at the flows required by AWWA C700 (low, intermediate, and full flow).
2. All meters shall be warranted as follows:

<u>Size</u>	<u>Low Flow Accuracy</u>	<u>Low Flow New Meter Accuracy</u>	<u>Low Flow Repaired Meter</u>
5/8"	1/8 gpm @ 95%	5 Yrs or 500,000 Gal	5-10 years or 1,500,000 Gal
3/4"	1/4 gpm @ 95%	5 Yrs. or 750,000 Gal	5-10 years or 2,300,000 Gal
1"	3/8 gpm @ 95%	5 Yrs. or 1,000,000	5-10 years or 3,000,000 Gal
1-1/2"	3/4 gpm @ 95%	1 year	1 year
2"	1 gpm @ 95%	1 year	1 year
4"	1/2 gpm @ 95%	1 year	1 year
6"	3/4 gpm @ 95%	1 year	1 year

3. Normal meter operating range shall be warranted per AWWA C700 Section 4.2 Table 1.

<u>Size</u>	<u>Range (100 +/- 1.5%)</u>
5/8"	1/2 - 20 gpm
3/4"	3/4 - 30 gpm
1"	1 - 50 gpm
1-1/2"	2 - 100 gpm
2"	2-1/2" - 160 gpm

<u>Size</u>	<u>Low Flow</u>	<u>Low Flow New Meter Accuracy</u>	<u>Low Flow Repaired Meter Accuracy</u>
5/8"	<u>1/8gpm@95%</u>	5Yrs or 500 KGAL	5-10 Yrs or 1.5 MGAL
3/4"	<u>1/4gpm@95%</u>	5Yrs or 750 KGAL	5-10 Yrs or 2.3 MGAL
1"	<u>3/8gpm@95%</u>	5Yrs or 1 MGAL	5-10 Yrs or 3 MGAL
1-1/2"	<u>3/4gpm@95%</u>	2Yrs or 1.6 MGAL	10Yrs or 5 MGAL
2"	<u>1gpm@95%</u>	2Yrs or 2.7 MGAL	10Yrs or 8MGAL

H. MANUFACTURER

1. Meters and meter parts shall be manufactured, assembled, and tested within the Continental United States. Manufacturers may be required to provide proof of where and of what percentage of the meter register, chamber, and maincase is manufactured as per specified.
2. Manufacturers shall have a minimum of fifteen years of field and production experience with all sizes of the model quoted for model standardization. Manufacturers shall provide only one model of meter which complies with these specifications. Meter suppliers must have been manufacturing meters for at least 100 years.

II. ENCODER REGISTER UNIT

A. REGISTRATION

1. The register shall provide a six-digit visual registration at the meter.
2. The unit shall, in a digital format, simultaneously encode the four, five or six most significant digits of the meter reading for transmission through the remotely located receptacle or other AMR device.
3. The dial shall have a red center sweep test hand and shall contain 100 equally divided graduations at its periphery. Register test rings shall be available for shop testing.
4. The register shall employ a leak detection indicator on the dial face.
5. Registers using pulse generation or conversion of pulse to digital output are not permitted. Batteries shall not be allowed.
6. The manufacturer will guarantee that the reading obtained electronically matches the mechanical odometer reading on the register and that the manufacturer will pay the difference at the current rate if a discrepancy appears.

B. MECHANICAL CONSTRUCTION

1. The unit must be constructed out of high strength polycarbonate and shall possess a hermetic sonic weld seal. Registers for inside set applications should be of oil-free designs.
2. The register shall be attached to the meter case by a bayonet attachment. Fastening screws or nuts shall not be required. A tamperproof seal pin shall be used to secure the register to the main case.
3. The register shall be removable from the meter without disassembling the meter body and shall permit field installation and/or removal without taking the meter out of service.

Provision shall be made in the register for the use of seal wires to further secure the register.

Terminal screws must be accessible on the register for transmission wire connection to the remote receptacle or a future AMR system. A permanently potted wire connection shall be available as an option.

C. ELECTRICAL CONSTRUCTION

1. The number wheels used in the register assembly shall be provided with spring-type bifurcated metal contacts to ensure data transmission.
2. Connection shall be made to the register by three screw-type terminals sonically inserted into the register top. Access to the terminals shall be available to all models of register, with the exception of a permanently potted version. A port cover shall be provided to cover the terminals after they have been wired.
3. Digitally formatted data transmitted from the register shall incorporate a checksum character to verify correct information transmission and integrity. The reading equipment shall indicate data errors.
4. The absolute encoder register shall automatically detect between two (2) wire and three (3) wire register protocol.

D. METER READING INFORMATION

1. The absolute encoder register shall provide to the reading equipment up to a six-digit meter reading. An identification number of up to ten-digits shall be provided with each reading.
2. The utility shall have the option to reprogram the internal register identification number an unlimited number of times.

3. The absolute encoder register must have the capability to provide additional custom information to the reader. This information shall be programmed by the utility and have the ability to be reprogrammed at anytime.

III. RADIO FREQUENCY METER INTERFACE UNIT (MIU)

A. PHYSICAL/MECHANICAL REQUIREMENTS

1. The MIUs must be compact electronic devices, connected to the water meters. They shall interrogate the encoder register and transmit the meter reading and other information to remote reading devices.
2. The same RF MIUs must be read either in the Walk-by System, with a handheld computer equipped with a radio frequency interface unit, or in a Mobil System, with a Unit mounted in a vehicle. This shall allow an easy migration between the two systems, without any change to devices or revisiting the site.
3. The MIUs shall be attached to new meters, or they shall retrofit existing meters in the field.
4. The MIUs must work in the system specifications defined in the above sections.
5. The MIUs shall be: “wall” type – to have the ability to be mounted in a basement or on the outside of a house; and “pit” type – to have the ability to be mounted in a pit or an underground vault. The wall type shall have a water enclosure; the pit shall have a fully potted waterproof design.
6. The proposed system must be currently compatible or have the ability to be upgraded to read the 1-way meter interface unit that meets the following specifications:
7. Wall unit:
 - a) The meter interface unit housing shall be constructed of a polycarbonate plastic compound and be capable of mounting both indoors and outdoors on wall or pole. The device must be water-resistant and capable of exposure to spray, splash as specified in NEMA 4 standard.
 - b) The device shall use a tamper deterrent seal. Tampering with the device functions or connections shall not be possible without causing visible damage to the device exterior or to the seal.

- c) The device shall be capable of operating at temperatures of -22°F to 149°F (-30°C to +65°C), with a humidity factor of 5 to 95% (condensing).
- d) The circuit board will be coated for moisture protection.
- e) The battery will be protected in a hard potting.
- f) The unit must retrofit to existing installations.
- g) The unit can be mounted either outside the house, inside the house or directly attached to the meter.
- h) The MIU device must be protected against static discharge without loss of data per IEC 801-2, issue 2.

8. Pit unit

- a) For pit or vault applications, the MIU shall be designed for being installed through the industry standard 1-3/4" hole in the pit lid with no degradation of transmission range. The meter interface unit will be capable of mounting to various thickness of pit lids from 1/2" to 2 1/2".
- b) The device shall be capable of operating at temperatures of -22°F to 149°F (-30°C to +65°C), and operating humidity of 0 to 95% (IP 68 rating). The range will not be affected when the pit is flooded.
- c) The circuit board and the battery will be protected by a potting.
- d) The antenna shall be made of a metallic and polycarbonate material to withstand traffic and shall have a dual seal connection to the MIU housing.
- e) The MIU device must be protected against static discharge without loss of data per IEC 801-2, issue 2.

B. OPERATIONS SPECIFICATIONS

1. For reliability and meter integrity, the vendor shall be the sole Manufacturer of the different components of the system (Reading Equipment, Route Management Software, RF Transmitters, and Meters) to provide a unique turnkey system offering to the utility. The manufacturer will guarantee that the reading obtained electronically matches the mechanical odometer read on the register and that he will pay the difference at the current rates whenever a discrepancy appears. Therefore, synchronization of electronic reading and mechanical read for any reason (battery change, register change, cut wire, register rollover...) is not acceptable.
2. For the purpose of ease of implementation, the system shall not require any special licensing, including licenses from FCC. The system must, therefore, operate in the 902 MHz to 928 MHz unlicensed bandwidth.
3. The System implementation shall not be delayed due to the uncertainty of Federal Licensing Requirements.
4. The System must be expandable at any time without getting authorization from the FCC.
5. No wake-up tone shall be necessary.
6. To minimize the potential for RF interference from other devices, the MIU shall transmit using the Frequency Hopping Spread Spectrum technique comprised of alternating pseudo-random frequencies within the 902 MHz to 928 MHz unlicensed bandwidth.
7. The meter interface unit shall operate within FCC Part 15 regulations for devices operating in the 902 MHz to 928 MHz unlicensed bandwidth. The output power of the devices will be governed by their conformance with these relevant FCC standards.
8. Output power shall meet FCC Part 15.247 requirements. Minimum 100 MW.
9. Power shall be supplied to the MIU by a lithium battery. The Vendor shall warrant that any battery provided and installed in the MIUs by the Vendor shall be free of manufacture and design defects, for a period of twenty (20) years – the first ten (10) years from their date of shipment from the factory without pro-rating and the second ten (10) years with a pro-rating as long as the MIU is working under the environmental and meter reading conditions specified, from their date of shipment from the factory without pro-rating, MIU working under the environmental and meter reading conditions specified.

10. The battery life shall not be affected by outside erroneous wake-up tones (i.e. other water, gas or electric utilities reading and therefore sending out a wake-up tone)
11. The number of reads performed must not affect the battery life.
12. The batteries shall be field replaceable (the replacement shall be demonstrated), and be designed for minimum ten (10) years life expectancy the MIU shall not require reprogramming, if the battery discharges before it is replaced.
13. No programming shall be necessary for installation.
14. The MIUs must be capable of reading two (2) networked at one time.
15. The single port MIU shall interface to absolute encoder registers via a 3-conductor wire without need for special configuration to the MIU.
16. The MIU shall not send readings older than an hour.
17. Sending a reading older than an hour when wire is cut is not acceptable, as it can lead to miss billing.
18. The MIU shall transmit the reading continuously at a predetermined transmission interval for the single encoder configuration and alternate transmission with two networked Neptune Encoder registered to maximize battery life.
19. Each device shall have a unique pre-programmed identification number of 10 characters. The ID number will be permanent and shall not be altered. Each device shall be labeled with the ID number in numeric form. The bar code label shall also display FCC approval information and manufacturer's designation. The dual port shall have two ID numbers.
20. The MIU shall transmit the encoded meter reading and its unique ID number.
21. Tamper – If wiring has been disconnected, a “non reading” shall be provided indicating wire tamper; a reading that gives the last available reading is an incorrect reading.
22. The MIU shall be mounted per the manufacturer's installation instructions using the Vendor's Handheld or Drive-By receiver.

23. The MIU shall be capable of being received by either a Hand-Held receiver or a mobile receiver without special configuration or remanufacture.
24. The Hand-Held reading equipment shall provide a test mode to verify operation of the MIU by displaying the MIU ID number and reading.

C. INSTALLATION AND TRAINING

1. Complete installation and operating instructions will be included for all of the supplied hardware and software equipment. The system manufacturer must supply the training. Proposal must include any additional costs for training and assistance to install and begin operation of the system. The Vendor will also inform the customer of what pre-installation activities are to be completed and what support material will be needed for the initial installation.

D. PERFORMANCE WARRANTIES

1. In evaluating bid submittals, warranty coverage will be considered. The Vendor shall be required to state its warranty and/or guarantee policy with respect to each item of proposed equipment. The procedure for submitting warranty claims must also be provided.
2. As a minimum, the electronics shall be warranted for one year from date of shipment for defects in material and workmanship.

E. SYSTEM MAINTENANCE AND SUPPORT

1. In addition to warranty periods, Vendors are required to supply information on required or optional maintenance programs beyond the warranty period for both hardware and software.
Vendor must offer Multiple Year Maintenance Contracts so (Utility) can take advantage of Multi-year discounts.
2. The location of and procedures for obtaining such support shall be stated. A toll free Support number must be provided for System Support.

F. VENDOR QUALIFICATIONS

1. The qualified Vendor will have a minimum of twenty years experience with reading systems. The selected Vendor shall be thoroughly versed in encoder meter technology and be a major supplier in the marketplace. The proposed system shall be manufactured and maintained by the selected Vendor or an equity partner. All Vendors shall document which manufacturers and models they are capable of interrogating with the proposed meter reading equipment.

A customer reference list shall be enclosed with the proposal.

PRICING

<u>Meters</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
MIU'S – MIV III UNITS (R-900V3)	2000	\$_____/EA	\$_____
5/8" STRAIGHT METER	25	\$_____/EA	\$_____
5/8" X 3/4" METER	1200	\$_____/EA	\$_____
3/4" METERS	100	\$_____/EA	\$_____
1" METERS	72	\$_____/EA	\$_____
1 1/2" METERS	25	\$_____/EA	\$_____
2" METERS	40	\$_____/EA	\$_____
4" COMPOUND METERS	4	\$_____/EA	\$_____
4" TURBINE	4	\$_____/EA	\$_____
6" COMPOUND METERS	2	\$_____/EA	\$_____
DAP – CE 5320	2	\$_____/EA	\$_____
12321-000 DAP CE5320 HANDHELD INTERFACE	2	\$_____/EA	\$_____
UNIVERSAL CRADLE FOR DAP CE5320	2	\$_____/EA	\$_____
12517-000 ADVANTAGE II COMPLETE PROBE/ ARB NEPTUNE	2	\$_____/EA	\$_____
11922-001 BATTERY PACK NEPTUNE	6	\$_____/EA	\$_____

NON COLLUSIVE AFFIDAVIT OF BIDDERS

BID# 3823 - Water Meters

State of (_____);

County of (_____).

I state that I am the _____ of _____
(title) (name of firm)

and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this Bid.

I certify that:

(1) The price and amount on this Bid has been arrived at independently and without consultation, communication, or agreement with any other bidder.

(2) Neither the price(s) nor the amount of this Bid and approximate price(s) nor approximate amount of this Bid has been disclosed to any other firm or person who is a Bidder and that no disclosure of these items will be made prior to the Bid opening.

(3) No attempt has been or will be made to induce any firm or person to refrain from proposing on this Bid, or to submit a Bid higher than this Bid, or to submit any intentionally higher or non competitive Bid.

(4) Neither the said Bidder nor any of its officers, partners, owners, representatives, employees or parties in interest, including this affidavit, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from Bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of New Britain, owner, or any person interested in the proposed Contract.

(5) The Bid of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other non competitive proposal.

(6) I state that _____ understands and acknowledges that all
(name of my firm)

representations of this affidavit are material and important, and will be relied on by the City of New Britain in awarding a contract for which this is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the City of New Britain of the true facts relating to the submission of Bids for this contract. That the City of New Britain also reserves the right to reject our Bid if failure to complete this document, have it notarized and submitted with our Bid documents.

The undersigned Bidder further certifies that this statement is executed for the purpose of including the City of New Britain to consider the Bid and make an award in accordance therewith.

Subscribe and Sworn to me this

_____ day of _____,
2015

Legal Name of Bidder

Business Address

Signature and Title of Person

Notary Public
My Commission Expires

Date

**Request for Taxpayer
Identification Number and Certification**

Give Form to the
requester. Do not
send to the IRS.

Print or type See Specific Instructions on page 2.	Name (as shown on your income tax return)	
	Business name/disregarded entity name, if different from above	
	Check appropriate box for federal tax classification (required): <input type="checkbox"/> Individual/sole proprietor <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____ <input type="checkbox"/> Other (see instructions) ▶ _____	
	<input type="checkbox"/> Exempt payee	
	Address (number, street, and apt. or suite no.) City, state, and ZIP code List account number(s) here (optional)	Requester's name and address (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number								
				-				
Employer identification number								
				-				

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here	Signature of U.S. person ▶	Date ▶
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General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

NOTICE TO PROSPECTIVE BIDDERS
CERTIFICATION REQUIRED

The City of New Britain Code of Ordinances, Sec. 2-575, reads as follows:

Sec. 2-575. Rejection of bid where bidder is in default to city.

The agent shall not accept the bid of a contractor who is in default on the payment of taxes, licenses or other monies due the city.

The agent shall include in the bid document a form to be executed by a bidder, certifying that said bidder is not in default on the payment of taxes, licenses or other monies due the city.

As used in this section, (1) a "principal" of a contractor shall mean an individual who is a director, an officer, an owner, a limited partner or a general partner; and (2) "default in the payment of taxes" shall mean the failure to pay taxes by the date such taxes are due and payable or the failure to be current with respect to a delinquent taxes payment schedule as set forth in a written agreement with the Tax Collector.

In accordance with this provision, prospective vendors make the following certification:

The principals, as defined above, of the entity submitting responses to Public Bid No. 3823 are: (Please type or print clearly and use additional pages if necessary).

1. Name: _____

Local Residence Address (if any) _____

Local Mailing Address (if any) _____

If a principal, as defined above, in any local entity other than the entity submitting a response to the Public Bid No. listed above, state the entity or entity's name(s) and address(es):

NOTICE TO PROSPECTIVE BIDDERS
CERTIFICATION REQUIRED

2. Name : _____

Local Residence Address (if any) _____

Local Mailing Address (if any) _____

If a principal, as described above, in any local entity other than the entity submitting a response to the Public Bid No. listed above, state the entity or entity's names(s) and address(es):

3. Name: _____

Local Residence Address (if any) _____

Local Mailing Address (if any) _____

If a principal, as defined above, in any local entity other than the entity submitting a response to the Public Bid No. listed above, state the entity or entity's name(s) and address(es):

**CITY OF NEW BRITAIN
PUBLIC BID NO. 3823**

**NOTICE TO PROSPECTIVE BIDDERS
CERTIFICATION REQUIRED**

4. Name : _____

Local Residence Address (if any) _____

Local Mailing Address (if any) _____

If a principal, as described above, in any local entity other than the entity submitting a response to the Public Bid No. listed above, state the entity or entity's names(s) and address(es):

5. Name : _____

Local Residence Address (if any) _____

Local Mailing Address (if any) _____

If a principal, as described above, in any local entity other than the entity submitting a response to the Public Bid No. listed above, state the entity or entity's names(s) and address(es):

**CERTIFICATION IS HEREBY MADE THAT _____ (ENTITY
SUBMITTING BID) AND PRINCIPALS THEREOF ARE NOT IN DEFAULT ON
PAYMENT OF TAXES, LICENSES, OR OTHER MONIES DUE THE CITY OF
NEW BRITAIN AS OF THE DATE OF BID SOLICITATION.**

Signature of Principal of Entity Submitting Bid:

_____ **Date:** _____

Review by Tax Collector: (To be filled in only if vendor is awarded the contract as the result of Public Bid)

By: _____ **Date:** _____



City of New Britain

New Britain, Connecticut 06051

*"New Britain:
A City for
All People"*

27 WEST MAIN ST., NEW BRITAIN, CT 06051

PHONE: (860) 826-3402

FAX: (860) 612-4204

E-MAIL: jpieper@newbritainct.gov

Date: _____, 2015

Subject: Water Meters, Public Bid No. 3823

To Whom It May Concern:

Specifications for subject bid solicitation are enclosed for your review and response.

If you do not submit a bid, we request that you complete the bottom portion of this letter and return to the writer's attention. This shall assist the City of New Britain in maintaining accurate bidders' lists.

Your cooperation is greatly appreciated.

Very truly yours,

Jack Pieper
Purchasing Agent

Company Name: _____

Address: _____

We are not responding to subject bid solicitation for the following reason:

- ☐ Our company does not sell the requested product.
- ☐ Our company does not provide the requested service.
- ☐ Our schedule will not allow us to provide the requested service at this time.
- ☐ Other (please explain): _____
